



# **2003 Field Artillery And Joint Fires Conference**



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# AGENDA



- **Essential Fire Support Trends**
- **EFST Method Development Challenges**
- **Planning From the Target Back**
- **Average Mission Processing Times**
- **Responsiveness Trends**
- **Fires Responsiveness Challenges**
  - **Trigger Development**
  - **Communications Planning**
  - **Fire Mission Processing**
- **Summary**
- **Questions**



# Essential Fire Support Task Trends



**Task and purpose of fires normally adequately describes our targeting objective and contribution to the scheme of maneuver.**



**Method rarely sufficiently describes in time and space how to accomplish the task and ultimately leads to target failure**

**Effects are often not quantifiable and usually fail to delineate criteria for successful task accomplishment by each delivery system because of poor linkage to the method.**



# DOCTRINAL DEFINITION OF AN EFST



<b>TASK</b>	<p>Describes the targeting objective fires must achieve against a specific enemy formation's function or capability. These formations are HPTs or contain one or more HPTs. Task is normally expressed terms of Objective, Formation, and Function.</p> <p><b>Objective:</b> The FSO can use numerous terms to describe targeting objectives, with the most common being Limit, disrupt, delay, divert, or damage.</p> <p><b>Formation:</b> A specific element or sub element of the enemy. <b>The FSO</b> can specify a vehicle type or target category as long as the element or sub-element is clear.</p> <p><b>Function:</b> A capability of the formation that is needed for it to achieve its primary task and purpose.</p>
<b>PURPOSE</b>	<p>Describes the maneuver or operational reason for the task. It should identify as specifically as possible the friendly maneuver formation that will benefit from the targeting objective and describe in space and time what the objective will accomplish.</p>
<b>METHOD</b>	<p>Describes how the task and purpose will be achieved. It ties the detect function to the deliver function in time and space and describes how to accomplish the task. It is normally described in terms of a priority, allocation, and restriction. Method include:</p> <p><b>Priority:</b> Priority of fires, assigns observers/other acquisition means triggers and priorities for NAIs, TAI's, EAs and/or HPT responsibilities.</p> <p><b>Allocation:</b> Describes the allocation of available FS assets including: artillery fires, CAS, Intelligence and electronic warfare assets or other attack assets to accomplish the mission. Specify attack criteria in terms of degree of damage and/or duration for each target (including special munitions, priority targets, and final protective fires).</p> <p><b>Restrictions :</b> Outlines any limitations or restrictions that may effect the accomplishment of the mission. These may include ammunition, FSCMs, ROE, or other restrictions that may affect the accomplishment of the EFST. These restrictions are written complete for each EFST or with standard abbreviations from the unit's SOP.</p>
<b>EFFECTS</b>	<p>Effects quantify the successful accomplishment of the task, provide the basis for the assess function of targeting, and contribute to the decision of whether or not to re-attack the targets. If multiple shooters are involved it helps delineate what each must accomplish and provides a trigger on when to proceed to the next EFST or fire support task.</p>
Chapter 1-8, FM 3-09.31, 1 OCT 02 and Chapter 3-16, FM 3-09.4, Final Draft	



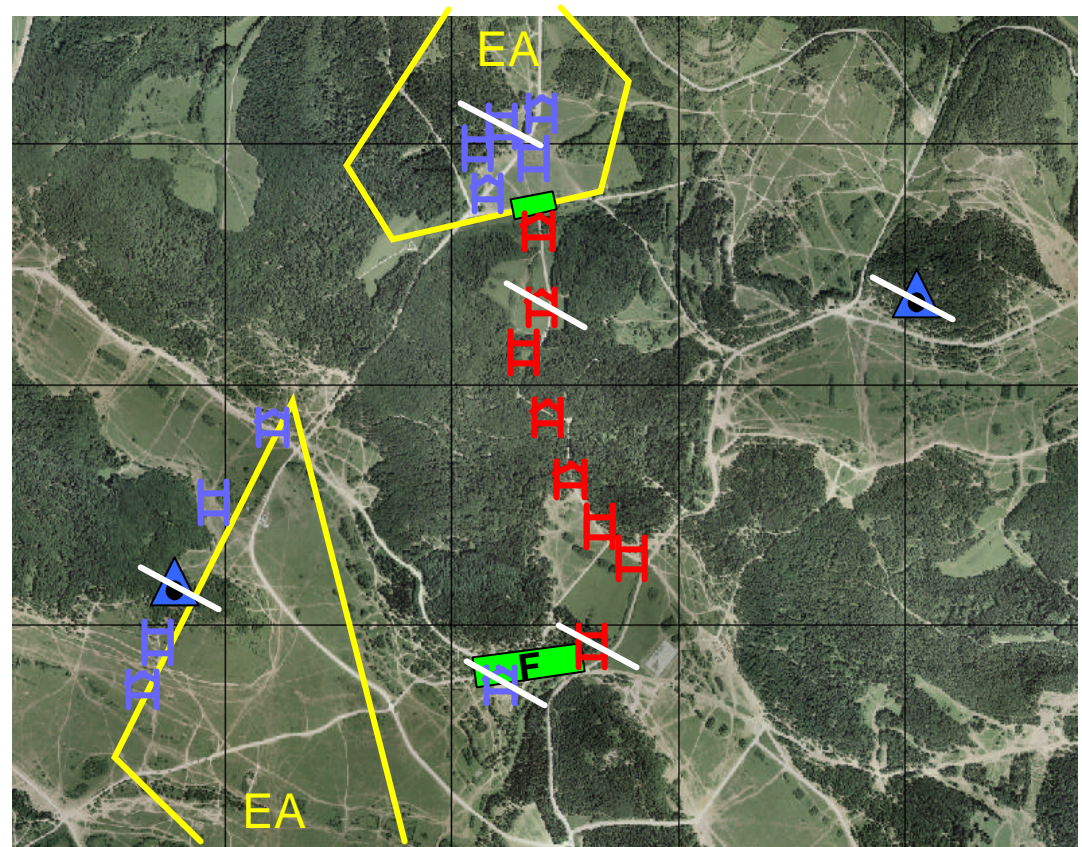


# Target Failure (Observation Planning)



Top-Down observation plan with refinement from Task Forces and BRT.

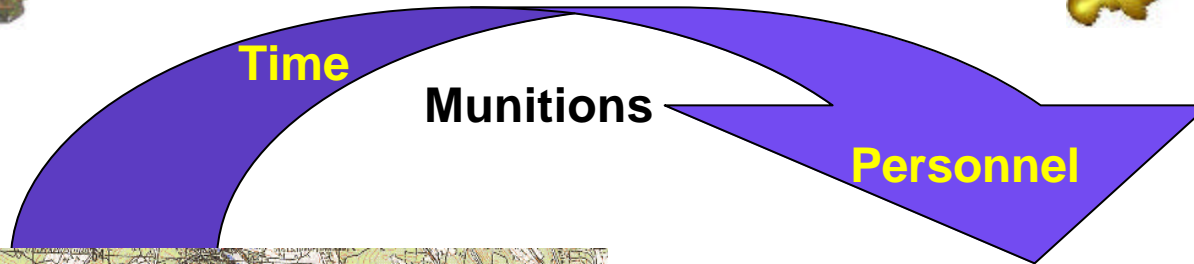
- EFST Targets not assigned to specific primary and alternate observers.
- Target Acquisition assets not fully integrated into observer plan.
- Lack of observers hamper both target detection and assessment.
- Top-Down observer plans rarely are refined, rehearsed, or tracked.







# Working From the Target Back

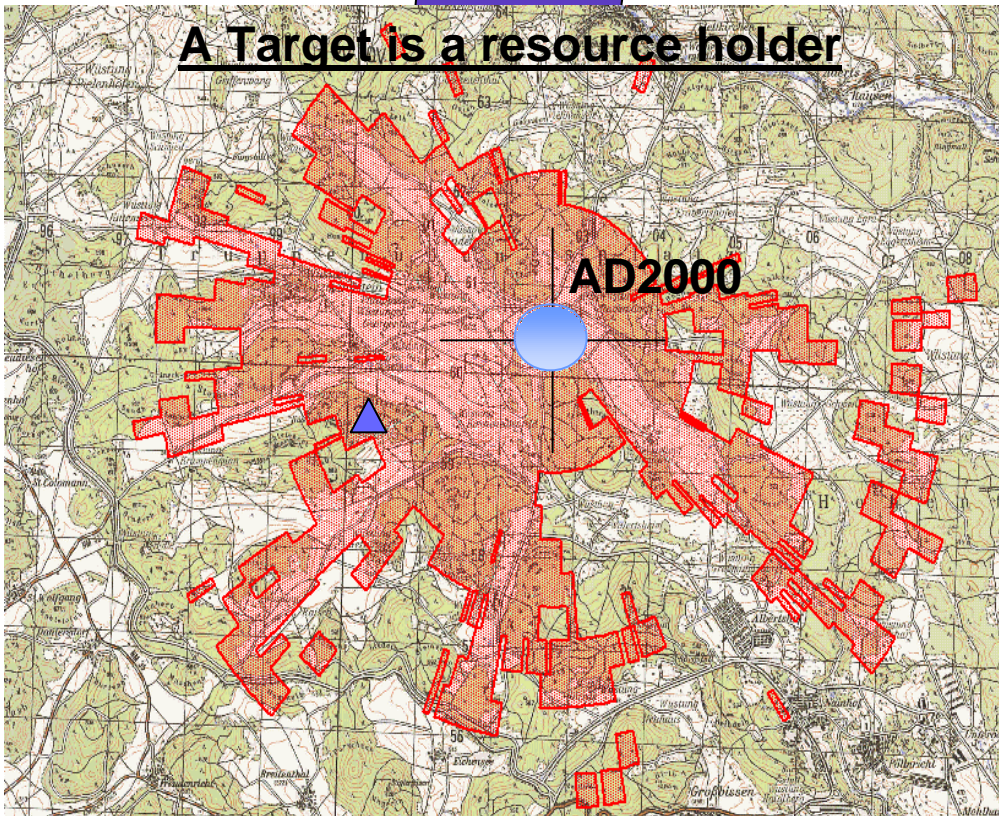


A Target is a resource holder

EFST target must be fully resourced

(PLOT-CR)<sup>2</sup>.

- Purpose (Nested with higher)
  - Location (Target / OP)
  - Observer (Primary / Alternate)
  - Trigger (Tactical and Technical)
- 
- Communications / Clearance
  - Rehearsed / Resourced





# What Can Happen in a Minute?



If an M109A6 is moving it is RTF within 75 seconds plus move time from receipt of mission.

If an M109A6 is stationary in a firing position it is RTF within 30 seconds (45 high angle) from receipt of mission.

ARTEP 6-037-30-MTP



A T-80B Main Battle Tank can engage 6-8 targets within one minute.

Worldwide Equipment Guide

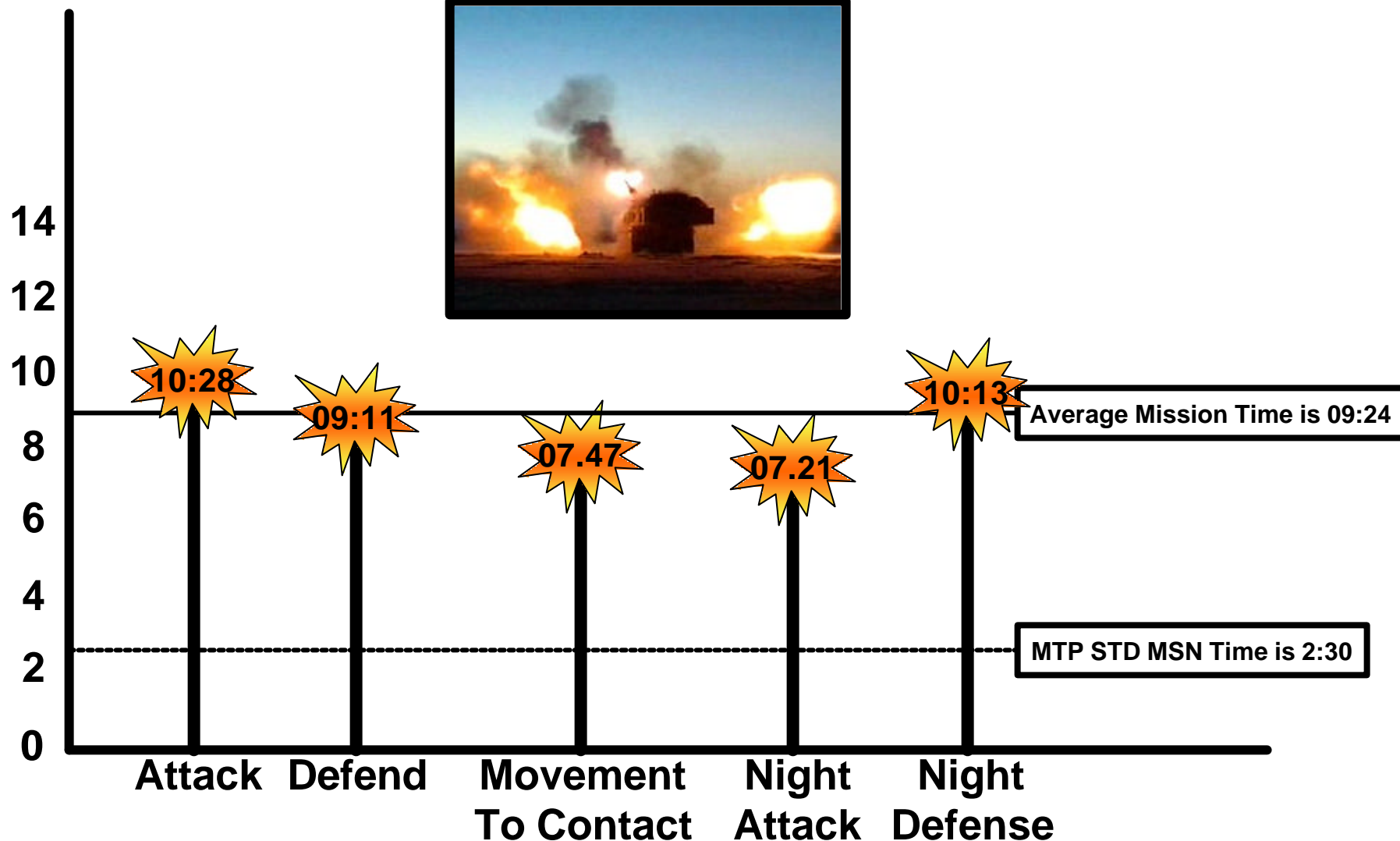




# AVERAGE MISSION TIMES



## 9 Minute Missions







# Responsiveness Trends



- Poor decision points and tactical triggers often increase decision making time during execution and inhibits our ability to rapidly clear and execute fires.
- FA battalions are having difficulties in ensuring FM communications throughout the depth and width of the battle space, which is effecting the responsiveness of our fires.
- Units are not using decentralized processing methods to reduce clearance times.



# Fires Responsiveness (Triggers)



Top-Down tactical and technical trigger development for Task Forces and BRT refinement.

- Triggers are ill-defined and often lead to premature or late target engagements.
- Use of contact triggers.
- Trigger refinement is not tied to target refinement.

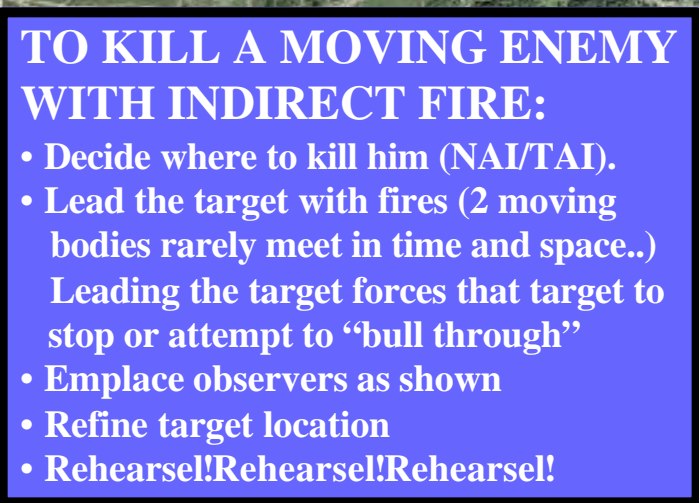




## TO KILL A MOVING ENEMY WITH INDIRECT FIRE:

- Decide where to kill him (NAI/TAI).
- Lead the target with fires (2 moving bodies rarely meet in time and space..)  
Leading the target forces that target to stop or attempt to “bull through”
- Emplace observers as shown
- Refine target location
- Rehearsel!Rehearsel!Rehearsel!

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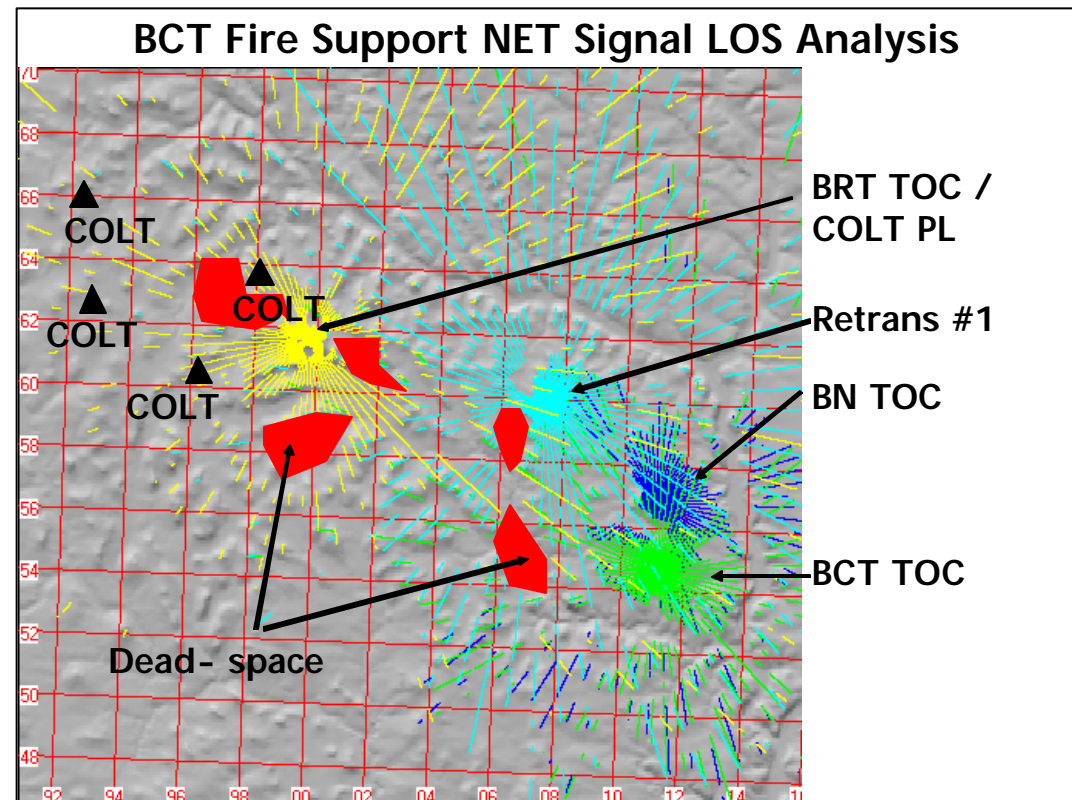


# Fires Responsiveness (Signal LOS Analysis)



Communications from the Sensor to shooter must be at the forefront of COA Development.

- Placement of FA retrans not integrated into FA battalion COA development.
- Use of LOS analysis tools.
- On-call vs. planned retrans operations often results in retrans vehicle employment after loss of communications with critical nodes.





# Fires Responsiveness

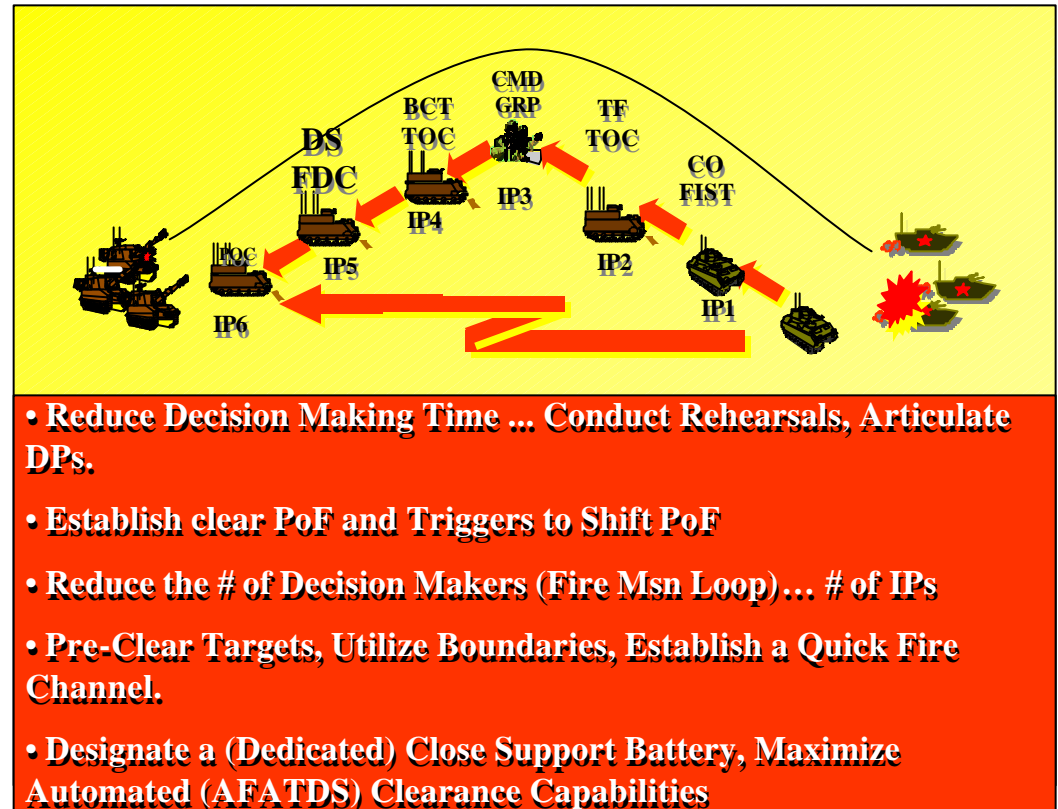
## Decision and Intervention

### Point Reduction



FSEs and the FA Battalion TOC must take active measures to reduce decision time and processing time at intervention points.

- High use of centralized manual clearance procedures.
- Limited success in use of quick fire channels because of lack of rehearsals and communications planning.
- Lack of clear POF and focus of fires often result in increased decision making time.



- **Reduce Decision Making Time ... Conduct Rehearsals, Articulate DPs.**
- **Establish clear PoF and Triggers to Shift PoF**
- **Reduce the # of Decision Makers (Fire Msn Loop)... # of IPs**
- **Pre-Clear Targets, Utilize Boundaries, Establish a Quick Fire Channel.**
- **Designate a (Dedicated) Close Support Battery, Maximize Automated (AFATDS) Clearance Capabilities**



# Summary



- **Essential Fire Support Trends**
- **Planning From the Target Back**
- **Average Mission Processing Times**
- **Responsiveness Challenges and TTPs**
  - **Trigger Development**
  - **Communications Planning**
  - **Fire Mission Processing**





## CMTC Trends



**WHAT ARE YOUR QUESTIONS?**